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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/616,537	07/09/2003	Teruaki Komiya	TOW-032	TOW-032 1933 EXAMINER	
959	7590 06/07/2006		EXAM		
LAHIVE & C			WEINER, LAURA S		
28 STATE ST BOSTON, MA			ART UNIT	PAPER NUMBER	
ŕ			1745		
			DATE MAILED: 06/07/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	
	10/616,537	KOMIYA, TERUAKI	
Office Action Summary	Examiner	Art Unit	
	Laura S. Weiner	1745	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence addres	is
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	I. lely filed the mailing date of this commu D (35 U.S.C. § 133).	·
Status			
 Responsive to communication(s) filed on <u>27 Ap</u> This action is FINAL. Since this application is in condition for alloward closed in accordance with the practice under Exercise. 	action is non-final. nce except for formal matters, pro		rits is
Disposition of Claims			
 4) ☐ Claim(s) 1-14 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-10,13 and 14 is/are rejected. 7) ☐ Claim(s) 11 and 12 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or 	vn from consideration.		
Application Papers			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the output of the output of the correction is objected to by the Examine.	epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.	
Priority under 35 U.S.C. § 119		•	
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list of the certified copies of the certified copies of the priorical bureau 	s have been received. s have been received in Application ity documents have been receive I (PCT Rule 17.2(a)).	on No ed in this National Stag	ge
Attachment(s) I) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	4)	(PTO-413) te atent Application (PTO-152))
Paper No(s)/Mail Date <u>7-9-03</u> .	6) 🔲 Other:		

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DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species (1) in the telephone interview on May 31, 2006 is acknowledged.

Claim Rejections - 35 USC § 112

2. Claims 4, 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 is rejected because it is unclear what the choices are because of the use of "or" and "and". If "and' is used then the claim should recite "selected from the group consisting of".

Claim 7 is rejected because it is unclear how it further limits claim 3. Is this claim stating that the second amine monomer could be Formulas (1), (2) or (3) and not (4)?

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-4, 6-10, 13-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Brinegar (3,841,492).

Brinegar teaches in columns 7-8 and 17-18, a membrane comprising a solution of a polybenzimidazole polymer having recurring units of the formula where R' is a heterocyclic ring such as a pyridine or a quinoline, etc. in a solvent capable of dissolving the polymer such as dimethyl sulfoxide, etc.

Since Brinegar teaches the same electrolyte having a solid polymer as a base material then inherently the same mole number of material per gram of base material is less than 0.0014 mol. must also be obtained.

In addition, the presently claimed property of mole number of material per gram of base material is less than 0.0014 mol. would have obviously have been present once the Brinegar product is provided. *In re Best, 195 USPQ 433 (CCPA 1977).*

6. Claims 1-9, 13-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schechter et al. "Imidazole and 1-methyl imidazole in phosphoric acid doped polybenzimidazole, electrolyte for fuel cells".

Schechter et al. teaches adding imidazolium salts to PBI/H3PO4 membranes.

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Since Schuster et al. teaches the same electrolyte having a solid polymer as a base material then inherently the same mole number of material per gram of base material is less than 0.0014 mol. must also be obtained.

In addition, the presently claimed property of mole number of material per gram of base material is less than 0.0014 mol. would have obviously have been present once the Schechter et al. product is provided. *In re Best, 195 USPQ 433 (CCPA 1977)*.

Allowable Subject Matter

7. Claims 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura S. Weiner whose telephone number is 571-272-1294. The examiner can normally be reached on M-F (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laura S Weiner Primary Examiner Art Unit 1745

June 1, 2006